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DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY
DIVISION OF PHYSICAL AND BIOLOGICAL SCIENCES
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September 18th, 2006

Deputy Secretary Lynn Scarlett
U.S. Department of the Interior
1849 C Street, NW
Washington, DC 20240

Dear Deputy Secretary Scarlett:

I would like to request your assistance in preventing the ongoing annual lead poisoning of thousands of Laysan albatross chicks on Midway Atoll National Wildlife Refuge, now part of the Northwestern Hawaiian Islands National Monument. Since I first started working on this issue in 2000, as many as 70,000 Laysan albatross chicks may have been lead poisoned from ingestion of lead-based paint. I had written you previously about the lead-based paint poisoning of albatross chicks on Midway back in 2004, but the 95 buildings/structures with peeling lead-based paint on Midway's Sand Island have not yet been remediated, and the problem remains. In fact, as the buildings become more and more deteriorated, the problem is getting worse over time. I ask that the Department of Interior fund the remediation of lead-based paint on and around the remaining buildings/structures on Sand Island as well as prioritize this funding in your budget.

My initial research that demonstrated Laysan albatross chicks are lead poisoned from ingestion of lead-based was conducted in 2000 and 2001 with other researchers from the University of California Santa Cruz and published in 2003 in the journal *Environmental Science and Technology*. Blood lead concentrations measured in Laysan albatross chicks near buildings with lead-based paint averaged 440 µg/dL; blood lead concentrations over 100 µg/dL have been shown to cause encephalopathy and death in both humans and animals. Additionally, many of the lead poisoned albatross chicks exhibit a condition of peripheral neuropathy referred to as "droopwing". Droopwing manifests in the chicks' inability to raise their wings, which commonly drag on the ground resulting in broken bones and open sores. Chicks with droopwing will never be able to fly. Their fate is death, either from complications of lead poisoning, or, if they manage to survive to fledging age, starvation when their parents stop feeding them. Lead is a highly toxic substance and even chicks that did not exhibit clinical symptoms of poisoning (e.g., droopwing) were shown to have blood lead levels high enough cause immunological and neurological impairment, decreasing their chances of survival.

I have been to Midway several times since my initial research to study this issue and Laysan albatross chicks are still ingesting lead-based paint either directly from buildings or from chips

that have fallen around the buildings. Most recently I observed chicks with droopwing in May 2006 and determined that tarps placed around the perimeters of buildings by U.S. Fish and Wildlife Service personnel did not prevent lead poisoning of albatross chicks (Please see enclosed pictures in a supplemental report from 2006).

The buildings on Sand Island Midway Atoll NWR are subject to extreme weathering processes so proper containment of deteriorating lead-based paint should be conducted expeditiously. Extreme caution should be used when removing lead-based paint from buildings in order to prevent additional incidental exposure to chicks; past researchers observed that routine maintenance of a building on Midway without proper containment of paint chips resulted in large numbers of droopwing chicks. Removal of abandoned building/structures on Sand Island is also strongly advised to ensure the most permanent solution to the problem. Approximately two-thirds of the 95 buildings with lead-based paint on Sand Island Midway Atoll are unused and/or abandoned.

I would be glad to answer any questions on this issue and to meet with you in your Washington offices. I hope you will work to obtain the \$5.6 million to correct this problem.

Sincerely,

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